



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/617,618

07/11/2003

Jeffrey Allen Hermanson

ACDT120915

2955

26389

7590

04/04/2006

EXAMINER

COMPTON, ERIC B

CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC
1420 FIFTH AVENUE
SUITE 2800
SEATTLE, WA 98101-2347

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

58

Office Action Summary	Application No. 10/617,618	Applicant(s) HERMANSON, JEFFREY ALLEN	
	Examiner Eric B. Compton	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
 4a) Of the above claim(s) 9-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention I, claim 1-8 in the reply filed on January 19, 2006, is acknowledged.
2. Claims 9-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent Claim 1 recites "A flanged connector ...," however, dependent claims 2-8 recite "A flange ring ..." Thus, claims 2-8 lack proper antecedent basis for "a flange ring." The dependent claims limitations should be in agreement with the independent claim limitation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3726

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. App. Pub. 2002/0094233 to Price et al in view of U.S. Pat. 5,195,789 to Walsh et al.

Price discloses a flanged connector (see Fig. 27) used to join double wall square or rectangular ducts in HVAC systems (see e.g., Fig. 21), the double wall ducts having an outer square or rectangular duct and an inner duct of corresponding shape and disposed within the outer duct, the flanged connector comprising:

a first square or rectangularly-shaped connector section (276) composed of from metallic material, said first connector section comprising an outer insertion flange (284), said outer insertion flange having sufficient length to allow connection to an outer duct of a double wall square or rectangular duct;

an exterior mating flange (288) extending substantially transversely from the outer insertion flange to define a first mating face and a first outer perimeter;

an exterior hem (see e.g. Fig. 10) that is spaced outwardly from the outer insertion flange, said exterior hem extending away from the outer perimeter of the exterior mating flange;

a second square or rectangularly-shaped connector section (278) composed of from metallic material, said second connector section comprising an inner insertion flange (286), said inner insertion flange having sufficient length to allow connection to an inner duct of a double wall square or rectangular duct;

an inner mating flange (290) extending substantially transversely from the inner insertion flange to define a second mating face and a second outer perimeter; and

an inner hem (see e.g., Fig. 10) that is substantially uniformly spaced outwardly from the inner insertion flange, said inner hem extending from the outer perimeter of the interior mating flange generally in the same direction as the inner insertion flange to overlap the outer insertion flange, wherein the inner hem is connected to the outer insertion flange such that the inner mating flange and the outer mating flange are aligned to form substantially one plane, the inner hem being of such length to permit the outer insertion flange to be connected to the outer duct and having sufficient length to allow connection with the outer insertion flange.

Price discloses the invention cited above but does not disclose that the connector sections are formed from 10-20 gauge metallic material.

Walsh discloses forming flanged connector sections for ducts. The reference discloses, "The connector members can be made of any suitable gauge metal, but it has been found in practice that for air conditioning ducts, the sheet metal should be of 18-gauge, 20-gauge, 22-gauge or 24-gauge galvanized steel." Col. 3, lines 49-52.

Regarding claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the connector sections from 10-20 gauge metallic material, in light of the teachings of Walsh, in order to provide sufficient strength and rigidity. See also *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)("[W]here the general conditions of a claim are disclosed in the prior

Art Unit: 3726

art, it is not inventive to discover the optimum or workable ranges by routine experimentation.").

Regarding claims 2-8, the method of Price can produce various configurations envisioned by Applicant. Furthermore, the state of the art is replete with examples of these types of connector flanges. See e.g., U.S. Pat. 5,022,688 to Arnoldt; U.S. Pat. 4,516,797 to Meinig; U.S. Pat. 4,046,409 to Virgin; & U.S. Pat. 565,499 to Pattison. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed such a connector flange using the method of Price in order to realize conventional connector types.

Prior Art References

The prior art references listed on the enclosed PTO-892, but not used in a rejection of the claims, are cited for their teachings of forming duct connectors.

U.S. Pat. 6,540,266 to Pakker discloses a similar invention for round and oval ducts.

Contact Information

Art Unit: 3726

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Compton whose telephone number is (571) 272-4527. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Nguyen can be reached on (571) 272-4491. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric B. Compton
Primary Examiner
Art Unit 3726

ebc